Appln. No. 09/905,716

Amendment Date: January 18, 2005

Reply to Office Action of November 18, 2004

Amendments to the Abstract:

Please replace the Abstract with the following rewritten

Abstract:

ABSTRACT

A filter and processing sequence is described that efficiently combines and performs two or

more tasks required to demodulate a composite 3G (third generation) wireless signal

formed by a combination of wideband 3.84 MHz (Universal Mobile Telecommunications

System, identified as acronym "UMTS", or Universal Mobile Telecommunications System

Terrestrial Radio Access, identified as acronym "UTRA") carriers and narrowband 1.2288

MHz CDMA-2000 carriers. The three tasks, applied to each spectral component of the 3G

wireless signal and described in the order of a traditional filtering structure are: Spectral

translation, Bandwidth Reduction, and Sample Rate Selection. These tasks are tradition-

ally implemented in three distinct pieces of hardware or software modules.